

TECHNICAL SERIES No. 17.

U. S. DEPARTMENT OF AGRICULTURE,
BUREAU OF ENTOMOLOGY.

L. O. HOWARD, Entomologist and Chief of Bureau.

CONTRIBUTIONS TOWARD A MONOGRAPH
OF THE SCOLYTID BEETLES.

CONTENTS AND INDEX.

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OF THE SCOLYTID BEETLES.

I. THE GENUS DENDROCTONUS.

By A. D. HOPKINS, *Forest Entomologist.*

II. PRELIMINARY CLASSIFICATION OF THE SUPERFAMILY SCOLYTOIDEA.

By A. D. HOPKINS, *Forest Entomologist.*



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ERRATA.

- Page x, line 23, for *Zimmerman* read *Zimmermann*.
 Page 1, first paragraph, second line, for 91 read 1902.
 Page 3, line 12, for *junipiri* read *juniperi*; line 14, for *Zimmerman* read *Zimmermann*.
 Page 40, legend to figure 26, for *left* read *right*, throughout; legend to figure 26, line 6, for *sinistral* read *dextral*, for *dextral* read *sinistral*.
 Page 41, legend to figure 27, line 1, for *left* read *right*.
 Page 42, legend to figure 28, line 1, for *left* read *right*.
 Page 43, legend to figure 43, line 1, for *left* read *right*.
 Page 59, legend to figure 40, line 4, for *gular* read *entogular*; line 5, for *gular* read *genal*, in both places.
 Page 60, legend to figure 41, line 4, for *labial* read *labral*.
 Page 61, line 18, after *areas* insert (*fig. 40, m*).
 Page 69, line 30, for *distinctly* read *strongly*.
 Page 80, line 43, for *Zimmerman* read *Zimmermann*.
 Page 90, line 15, for *Zimmerman* read *Zimmermann*.
 Page 95, line 7, for *Zimmerman* read *Zimmermann*, after *type* omit comma; line 35, for *Zimmerman* read *Zimmermann*.
 Page 98, line 38, for *lejophilla* read *lejophylla*.
 Page 101, line 3, for *lejophilla* read *lejophylla*.
 Page 124, line 21, for 2289 read 2298.
 Page 146, line 18, for *Quairière* read *Quairière*.
 Page 148, line 19-20, for *Zimmerman* read *Zimmermann*.
 Page 150, line 13, for *Zimmerman* read *Zimmermann*.
 Page 154, line 11, for *Cabon* read *Cobon*.
 Page 156, line 30, for *Zimmerman* read *Zimmermann*.
 Page 157, line 1, for *Zimmerman* read *Zimmermann*.
 Page 160, line 19, for *X V* read *II*; line 20, for *Zimmerman* read *Zimmermann*; line 21, for *X V* read *II*, for 150 read 149.
 Page 164, line 28, for 1906b read 1905.
 Page 179, line 8, for *X* read *IX*.

LETTER OF TRANSMITTAL.

U. S. DEPARTMENT OF AGRICULTURE,
BUREAU OF ENTOMOLOGY,

Washington, D. C., March 16, 1909.

SIR: I have the honor to transmit herewith manuscript of the first part of a bulletin of the technical series to be entitled "Contributions toward a Monograph of the Scolytid Beetles." This family of beetles includes some of the most important enemies of North American forests, as well as of crude forest products, and therefore must demand special attention in future systematic and economic investigations by this bureau and by forest entomologists connected with other public institutions and private enterprises. It is necessary, as a foundation for such work, that the heretofore described species should be accurately identified, that those new to science should be described, and that this information, together with other systematic data based on original research by this bureau, should be made available in the form of contributions to a monograph. This work has been undertaken by Dr. Hopkins, of this bureau, and the greater part of the collecting and working up of the material has been completed. Delay in publication will be avoided, and it is believed that the published results will be more useful in future systematic and economic investigation if the results relating to groups of species which have similar characters and characteristics and similar relations to given economic problems are published as parts of a bulletin rather than in one undivided publication. These technical parts are to be supplemented in a like manner by parts of a bulletin of the regular series, giving information of immediate practical importance to the forester and owners and managers of private forests.

The first part of this bulletin is entitled "The Genus *Dendroctonus*." It embodies the results of extensive systematic investigations of the genus, carried on by Dr. Hopkins during the past 17 years, and is of especial interest and importance from the fact that it deals with a small group of beetles which are the most destructive enemies of the principal coniferous forest trees of North America.

The discussions and illustrations relating to anatomical and technical details are necessary as a basis for the correct description, interpretation, and recognition of generic and specific characters, on which depends the future success of economic work on the scolytid beetles.

and as aids in the preparation of technical and economic contributions to the monograph.

I recommend the publication of this paper as Part I of Technical Series, No. 17, of the Bureau of Entomology.

Respectfully,

L. O. HOWARD,
Chief of Bureau.

Hon. JAMES WILSON,
Secretary of Agriculture.

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